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## Effectiveness of Teaching with Movies to Promote Positive Characteristics and Behaviors

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### Abstract

The purpose of this study was to determine whether a systematic movie-based teaching course can promote positive characteristics and behaviors of Thai students. The sample of this study was 156 undergraduate students of a public university in northern Thailand. The research was conducted in two semester of the 2014 academic year. The experimental groups consisted of 41 and 44 students in the first and second semester, and the control group consisted of 35 and 36 students. Both experimental groups enrolled the “teaching-with-movie” class for credits, and viewed 11 movies during the semester. In addition, both experimental groups participated in a 30-minute discussion after viewing each movie. For the control groups, participants enrolled in social psychology course and received no intervention. Through a pretest, posttest control group quasi-experimental design, the two experimental groups showed a significant increase in positive characteristics and behaviors, while the control group showed no significant increase. In addition, results of the analysis of covariance showed that a systematic movie-based teaching course positively developed positive characteristics and behaviors, as the group variable predicted positive characteristics and behaviors at posttest while controlling for pretest scores. Overall, the results of this study provide support that positive characteristics and behaviors can be enhanced through a systematic movie-based teaching course.

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## 1. Introduction

The contributions of positive psychology movement in recent decades have generated much interest in the positive features of individual functioning. Both scholars and practitioners have begun to identify major characteristics and behaviors that may promote well-being and flourishing. Several positive characteristics and behaviors have been presented in academic journals such as “positive thinking” (Scheier & Carver, 1993), “personal growth initiative” (Robitschek, 1998), “positivity” (Diener, Scollon, Oishi, Dzokoto, & Suh, 2000), “positive psychological capital” (Luthans, 2002), and “positive orientation” (Caprara et al., 2009). Researchers have also been interested in designing effective interventions for enhancing these characteristics and behaviors. The major goal of this movement is to enable individuals to fully utilize their potentials (Odou & Vella-Brodrick, 2013). A meta-analysis of 51 positive interventions indicates that these interventions enhanced well-being and decreased depressive symptoms (Sin & Lyubomirsky, 2009). Similarly, a review of positive psychology interventions in organizations also shows that positive interventions are a promising tool for enhancing well-being and probably also for enhancing performance (Meyers, van Woerkom, & Bakker, 2013).

Although recent studies of the effectiveness of positive interventions in promoting positive characteristics and behaviors have been promising, a search for new intervention is still needed, especially for young people. It is very important to encourage the development of positive characteristics and behaviors among university students as they move away from parental influence and begin making their own decisions (Harvey & Retter, 2002). This study, therefore, aimed to study the effectiveness of teaching with movies to promote positive characteristics and behaviors of university students. Movies were chosen as teaching tools because they are a significant part of young culture in contemporary societies (Hebert & Neumeister, 2001). Typically, movies offer both affective and cognitive experiences. In addition, movie scenes, containing strong emotional content, can provoke discussion, assessment of one's values, and assessment of self (Champoux, 1999). It has been suggested that “the medium of film, more than any other art form, is able to portray the subtleties of the human mind — thoughts, emotions, instincts, and motives — and their impact on behavior (Niemic & Wedding, 2008, p. 5).”

Thus, this study proposes that teaching with movies is a powerful tool for developing positive characteristics and behaviors of young people. The objective of this study is to test the effectiveness of teaching with movies by addressing the following research question: “Can positive characteristics and behaviors be promoted through a systematic movie-based teaching course?” If the teaching with movies is effective, changes in participants' positive characteristics and behaviors would be observed; no change would be observed if there was no intervention.

## 2. Positive Characteristics and Behaviors

### 2.1. Positive orientation

Positive characteristics and behaviors are determinants that promote well-being and flourishing. In this study, positive characteristics was operationalized and measured by using the “positive orientation” construct (Caprara et al., 2009). Positive orientation is an individual's tendency to view and address life and experience with a positive outlook and operationalized as the common latent factor at the core of self-esteem, life satisfaction, and optimism. It was proposed that people need a certain amount of positive orientation to cope with the inevitable adversities and negative consequences (Alessandri, Caprara, & Tisak, 2012; Caprara, Steca, Alessandri, Abela, & McWhinnie, 2010).

Studies have indicated that positive orientation is a significant predictor of depression, positive and negative affectivity, and quality of friendships and health (Alessandri et al., 2012; Caprara et al., 2010). Other findings also show a positive relation of positive orientation with the positive sides of personality traits, psychological well-being, resilience, self-efficacy, basic values, trust, pro-sociality and adjustment in various domains of life (e.g., family, school, and work (Alessandri et al., 2012). In addition, it was found that there are negative relations between positive orientation and depression, shyness, somatic complaints, irritability, hostile rumination, and violence (Alessandri et al., 2012).

In sum, these findings indicate positive orientation is an important determinant of individuals' subjective well-being. Positive orientation as a dispositional characteristic explains both individual variation and stability on the

levels of subjective well-being, despite environmental changes (Caprara, Alessandri, Eisenberg, et al., 2012; Diener et al., 2000).

## 2.2. *Personal growth initiative*

Personal growth initiative (PGI) is an active, intentional engagement in the process of personal growth and in self-changing (Robitschek, 1998). Individuals are said to be on the path of personal growth initiative if they intentionally engage themselves in the growth process. It is a developed skill set (i.e., cognition, behavior, attitude and motivation) that individuals carry into their life experiences (Robitschek, 1998). Accordingly, Robitschek et al. (2012) developed the Personal Growth Initiative Scale–II (PGIS–II) to measure personal growth initiative. The PGIS–II consists of 16 items that tap the four distinct dimensions underlying the construct of personal growth initiative. The four dimensions are as follows:

- a) *Readiness for change*. It is an ability to assess one's own psychological preparedness to engage in personal growth processes.
- b) *Planfulness*. It is an ability to be strategic and organized in self-change efforts.
- c) *Using resources*. It is an ability to identify and access resources external to the self, such as other people and materials.
- d) *Intentional behavior*. It is actual follow-through, or doing of self-change plans and behaviors.

Personal growth initiative plays an important role in a transition from university to work life. University presents an environment for many students to help them develop themselves and create an independent and meaningful life (Stevic & Ward, 2008). During college life, students try to plan their future and develop themselves step by step. Students with high level of PGI not only know the direction they want to grow, but also actively seek for growth opportunities. In sum, students with high PGI have an action plan to achieve their chosen goals (Robitschek, 1998).

Research has found that individuals with high levels of PGI have high levels of hope (Shorey, Little, Snyder, Kluck, & Robitschek, 2007), well-being and self-acceptance (Robitschek & Keyes, 2009), and they are able to cope with life's developmental tasks, such as career development (Robitschek & Cook, 1999). In addition, individuals with high levels of PGI have low levels of anxiety, depression, and general emotional distress (Robitschek & Kashubeck, 1999).

## 3. **Movies as a Teaching Resource**

Movies provide an excellent vehicle for educational purposes. Literature shows that teaching with movies has been adopted in a variety of subjects. For example, publications exist on the educational use of movies in Psychology (Boyatzis, 1994; Paddock, Terranova, & Giles, 2001), Counselor Education (Higgins & Dermer, 2001), Medicine (Crellin & Briones, 1995), Management Education (Champoux, 1999), and Sociology (Valdez & Haley, 1999).

Movies can be a powerful tool for illustrating course content, promoting a visualization of concepts and theory, increasing student involvement, and promoting critical thinking and analytical skills (Casper, Watt, Schleicher, Champoux, Bachiochi, & Bordeaux, 2003). A significant benefit of movies is that they offer both affective and cognitive experiences. Research found that individuals learn new, novel, and abstract concepts more easily when presented in both verbal and visual form (Salomon, 1979). It is also found that visual media make concepts more accessible to individuals than text media and help with later recall (Cowen, 1984).

The effectiveness of teaching with movies has been reported. For example, Kirsh (1998) found that the animated film assignment appears to improve students' understanding of course material. Students also report that assignments involving watching movies are particularly rewarding (e.g., Bluestone, 2000). A meta-analysis found that visual media using in nursing education had significant effects on attitude change and retention (Schermer, 1988). In addition, numerous reports indicate that movies help providing role models, identifying and reinforcing strengths, facilitating communication, and building hope (Niemic & Wedding, 2008). Research in the training area has also found that movie-based training had positive effects in reducing anxiety, and increasing learning social skills (Allen, Danforth, & Drabman, 1989; Martin & Jones, 1994).

In sum, literature has shown that movies are an excellent tool for developing a variety of positive characteristics and behaviors. Thus, based on research to date on effects of teaching with movies, it was hypothesized that positive characteristics and behaviors can be enhanced in university students through a systematic movie-based teaching course, that is positive characteristics and behaviors would significantly increase for participants in the teaching-with-movie course but not for participants in the control group.

#### 4. Method

##### 4.1. Participants

This study used a pretest, posttest control group quasi-experimental design utilizing a homogeneous sample of 156 undergraduate student of a large public university in northern Thailand. The research was conducted in two semester of the 2014 academic year. The experimental groups consisted of 41 and 44 students in the first and second semester, and the control group consisted of 35 and 36 students. Both experimental groups enrolled the “teaching-with-movie” class for credits, and viewed 11 movies during 15-weekly sessions. In addition, both experimental groups participated in a 30-minute discussion after viewing each movie. For the control groups, participants enrolled in social psychology course and received no intervention. All of the participants ranged in age from 17 to 23 years, with a mean age of 20.44 ( $SD = 1.17$ ). In the total sample, 35 participants (22.4 %) were male and 121 participants (77.6 %) were female.

##### 4.2. Measures

(1) *Positivity scale*. The Positivity scale (Caprara et al., 2012) was used to measure individuals’ positive orientation. The questionnaire composed of eight items, responses were made on a 6-point scale ranging from 0 (strongly disagree) to 5 (strongly agree). Sample items are: “I have great faith in the future,” and “I am satisfied with my life.” The scale was translated to Thai with back-translation to ensure language equivalence. Cronbach’s alpha for the scale was .81 (pretest) and .85 (posttest).

(2) *Personal Growth Initiative Scale-II*. The PGIS-II (Robitschek et al., 2012) was used to measure individuals’ positive behaviors. This 16-item scale is made up of four subscales measuring readiness for change, planfulness, using resources, and intentional behavior. Responses were made on a 6-point scale ranging from 0 (strongly disagree) to 5 (strongly agree). Sample items are: “I set realistic goals for what I want to change about myself,” and “I actively work to improve myself.” The scale was translated to Thai with back-translation to ensure language equivalence. Cronbach’s alpha for the scale was .87 (pretest) and .80 (posttest).

(3) *Demographic information*. The author developed a demographic information sheet asking participants to indicate their age, gender, and other information.

##### 4.3. Procedures

All participants completed all questionnaires at the beginning of the semester (T1). Interventions with experimental groups were carried out in 15-weekly sessions by the author. During each session, the experimental groups (teaching with movies) viewed a movie and participated in group discussion, and the control groups did not receive any intervention. At the end of the semester, all participants completed all post-test questionnaires (T2). Thus, the design of this study was as follows:

Experimental group	T1	X	T2
Control group	T1		T2

*Note.* X = watching movies and group discussion

To select the movies for enhancing positive characteristics and behaviors in this study, the following two criteria were used:

(a) A vivid portrayal of positive characteristics and behaviors; i.e., personal responsibility, positive thinking, motivation and hope, perseverance and persistence, love of learning, love, friendship, forgiveness and mercy, generosity and good citizenship, leadership and teamwork, integrity, openness to experiences, humor and creativity.

(b) A mood in the movie that is uplifting and motivating.

Table 1 shows the list of movies selected based on the above criteria.

Table 1. List of movies selected for teaching

Film	Positive characteristics and behaviors exhibited
<i>Top secret</i> (a Thai film)	personal responsibility
<i>Life is beautiful</i>	positive thinking, motivation and hope
<i>The pursuit of happiness</i>	perseverance and persistence
<i>October sky</i>	love of learning
<i>Patch Adams</i>	openness to experiences, humor and creativity
<i>Forrest Gump</i>	integrity
<i>Intouchables</i>	friendship
<i>The notebook</i>	love
<i>Invictus</i>	forgiveness and mercy
<i>Amelie</i>	generosity and good citizenship
<i>Apollo 13</i>	leadership and teamwork

Experimental groups viewed these eleven movies. In addition, experimental groups participated in a 30-minute elaboration session about positive characteristics and behaviors after viewing each movie. In each group discussion session, the following questions were used as discussion points: (a) How do you feel about the movie? (b) Who was your favorite character? Why? (c) What do you learn from the movie? (d) How would you apply the lessons learned from the movie to your life? (e) How can we develop positive characteristics and behaviors? For the control group, participants were requested to answer pretest and posttest questionnaires without receiving any intervention.

## 5. Results

### 5.1. Preliminary analysis

After checking for missing data, the statistical analyses were performed on a final sample of 156 participants. The means and standard deviations for variables in this study for all groups over 2-time periods are shown in Table 2.

Table 2. Descriptive statistics for all groups for two-time periods

Time Period	Group	n	Positive orientation		Personal growth initiative	
			M	SD	M	SD
Pretest	Experimental 1	41	3.09	.63	3.03	.51
	Experimental 2	44	3.28	.72	3.27	.51
	Control 1	35	3.43	.59	3.24	.45
	Control 2	36	3.44	.53	3.49	.52
Posttest	Experimental 1	41	3.62	.55	3.63	.89
	Experimental 2	44	3.62	.80	3.74	.62
	Control 1	35	3.41	.56	3.41	.48
	Control 2	36	3.48	.64	3.47	.46

*Note.* Experimental 1 and Control 1 were participants in the first semester of the 2014 academic year. Experimental 2 and Control 2 were participants in the second semester of the 2014 academic year.

## 5.2. Hypotheses testing

It was hypothesized that positive characteristics and behaviors would significantly increase for participants in the experimental groups but not for subjects in the control groups. To test this hypothesis, the researcher created two change variables using the following formulas: (1) PORC = POR posttest score – POR pretest score; (2) PGISC = PGIS posttest score – PGIS pretest score. Two one-way analyses of variance were conducted to examine the effects of group on positive characteristics and behaviors from pretest to posttest periods. In both analyses, the independent variable was group, for the first analysis the dependent variable was PORC, and for the second analysis the dependent variables was PGISC. Preliminary checks indicated that the assumptions of homogeneity of variance, linearity, normality, and independence of observations were met.

For participants in the first semester, results shown in Table 2 indicate that there was a significant difference in positive orientation and personal growth initiative for the two groups ( $F(1, 75) = 19.993, p = .000$ ;  $F(1, 75) = 7.840, p = .007$ , respectively). The effect size for positive orientation, calculated using  $\eta^2$ , was .21 indicating a large difference in the mean scores of the groups. For personal growth initiative, the effect size ( $\eta^2$ ), was .09 indicating a moderate difference in the mean scores of the groups.

Table 3. ANOVA results for effects of teaching with movies on positive characteristics and behaviors for the participants in the first semester

		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
PORC	Between Groups	5.541	1	5.541	19.993	.000
	Within Groups	20.509	74	.277		
	Total	26.050	75			
PGISC	Between Groups	3.433	1	3.433	7.840	.007
	Within Groups	32.404	74	.438		
	Total	35.837	75			

For participants in the second semester, results shown in Table 4 indicate that there was a significant difference in positive orientation and personal growth initiative for the two groups ( $F(1, 79) = 6.186, p = .015$ ;  $F(1, 79) = 17.787, p = .000$ , respectively). The effect size for positive orientation, calculated using  $\eta^2$ , was .07 indicating a moderate difference in the mean scores of the groups. For personal growth initiative, the effect size ( $\eta^2$ ), was .19 indicating a large difference in the mean scores of the groups.

Table 4. ANOVA results for effects of teaching with movies on positive characteristics and behaviors for the participants in the second semester

		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
PORC	Between Groups	1.773	1	1.773	6.186	.015
	Within Groups	22.355	78	.287		
	Total	24.128	79			
PGISC	Between Groups	4.697	1	4.697	17.787	.000
	Within Groups	20.598	78	.264		
	Total	25.295	79			

Since the analysis focused on mean differences between the experimental and control groups, we conduct two analyses of covariance (ANCOVA). The first ANCOVA, conducted for participants in the first semester, uses the posttest scores on positive orientation and personal growth initiative as the dependent measures and the pretest score on these variables as the covariate. Results shown in Table 5 suggest that the group variable was a significant predictor of positive orientation and personal growth initiative at posttest ( $F(1, 76) = 13.412, p = .000$ ;  $F(1, 76) = 7.168, p = .009$ ).

Table 5. ANCOVA result using posttest scores as the dependent measure, controlling for pretest scores for the participants in the first semester

Source	Var	SS	df	MS	F	p
Corrected Model	POR-post	9.188	3	3.063	15.142	.000
	PGIS-post	10.846	3	3.615	8.707	.000
Intercept	POR-post	3.797	1	3.797	18.774	.000
	PGIS-post	1.547	1	1.547	3.725	.058
POR-pre	POR-post	5.380	1	5.380	26.597	.000
	PGIS-post	1.044	1	1.044	2.515	.117
PGIS-pre	POR-post	.116	1	.116	.572	.452
	PGIS-post	4.267	1	4.267	10.277	.002
GR	POR-post	2.713	1	2.713	13.412	.000
	PGIS-post	2.976	1	2.976	7.168	.009
Error	POR-post	14.563	72	.202		
	PGIS-post	29.897	72	.415		
Total	POR-post	967.922	76			
	PGIS-post	984.914	76			
Corrected Total	POR-post	23.751	75			
	PGIS-post	40.743	75			

Note. POR-pre = positive orientation score at pretest, PGIS-pre = personal growth initiative score at pretest; *R* Squared = .387 and .266 for POR and PGIS respectively

The second ANCOVA, conducted for participants in the second semester, uses the posttest scores on positive orientation and personal growth initiative as the dependent measures and the pretest score on these variables as the covariate. Results shown in Table 6 suggest that the group variable was a significant predictor of positive orientation and personal growth initiative at posttest ( $F(1, 80) = 5.442, p = .022$ ;  $F(1, 80) = 15.950, p = .000$ ).

## 6. Discussion

The objective of this study was to determine whether a systematic movie-based teaching course can promote positive characteristics and behaviors of university students. Specifically, the research question was whether positive characteristics and behaviors could be effectively developed in a teaching with movies course. Through a pretest, posttest control group quasi-experimental, the experimental groups experienced a significant increase in positive characteristics and behaviors, while the control groups that receive no intervention, did not show a significant increase in positive characteristics and behaviors. In addition, results of the ANCOVA demonstrated that the teaching with movies course positively developed positive characteristics and behaviors. Overall, the results of this study provide support that positive characteristics and behaviors can be enhanced through a systematic movie-based teaching course.

The findings that the teaching with movies course increased positive characteristics and behaviors support findings of previous studies (e.g., Ayres et al., 1993; Martin & Jones, 1994; Powell & Newgent, 2010; Smithikrai, Longthong, & Peijisel, 2014), which have shown that movies are a powerful tool for enhancing positive characteristics and reducing negative ones. This is because the appropriate movies speak to the 'unspoiled spot that is present in all of us, where people escape from their lives into themselves and come out feeling better, stronger, and more willing to take healthy action' (Niemiec & Wedding, 2008, p. 8). Moreover, the dialogue, camera angles, music, lighting, and sound effects of a movie synergistically induce viewers to be in a trance-like state. Thus, viewers are likely to be influenced by behaviors being portrayed in the movie. Consequently, viewers leave the movie with new ideas about values and behaviors they need to develop and strengthen.



Table 6. ANCOVA result using posttest scores as the dependent measure, controlling for pretest scores for the participants in the second semester

Source	Var	SS	df	MS	F	p
Corrected Model	POR-post	21.732	3	7.244	26.159	.000
	PGIS-post	11.398	3	3.799	19.972	.000
Intercept	POR-post	.734	1	.734	2.650	.108
	PGIS-post	2.556	1	2.556	13.436	.000
POR -pre	POR-post	13.535	1	13.535	48.875	.000
	PGIS-post	2.595	1	2.595	13.641	.000
PGIS-pre	POR-post	.117	1	.117	.421	.518
	PGIS-post	1.973	1	1.973	10.373	.002
GR	POR-post	1.507	1	1.507	5.442	.022
	PGIS-post	3.034	1	3.034	15.950	.000
Error	POR-post	21.046	76	.277		
	PGIS-post	14.458	76	.190		
Total	POR-post	1054.531	80			
	PGIS-post	1073.484	80			
Corrected Total	POR-post	42.778	79			
	PGIS-post	25.856	79			

Note. POR-pre = positive orientation score at pretest, PGIS-pre = personal growth initiative score at pretest; R Squared = .508 and .441 for POR and PGIS respectively

This study, however, has some limitations. First, this study examined the short-term effects of a systematic movie-based teaching course. Future research might examine whether the benefits of a systematic movie-based teaching course are maintained over longer time periods. Second, the use of self-report measures in this study is subject to social desirability effects. Participants might respond social desirably even though their anonymities are guaranteed. In conclusion, although the present study must be replicated in order to firmly establish the generalizability of the findings, this study suggests that a systematic movie-based teaching course may have significant effects on positive characteristics and behaviors. If the replications are successful, the usefulness of a systematic movie-based teaching course would be extended.

The results of the present study have some practical implications. It suggests that students' positive characteristics and behaviors may be developed using a systematic movie-based teaching course - a relatively convenient and inexpensive, yet effective tool.

## 7. References

- Allen, K. D., Danforth, J. S., & Drabman, R. S. (1989). Videotaped modeling and film distraction for fear reduction in adults undergoing hyperbaric oxygen therapy. *Journal of Consulting and Clinical Psychology*, 57, 554-558. <http://dx.doi.org/10.1037/0022-006X.57.4.554>
- Alessandri, G., Caprara, G. V., & Tisak, J. (2012). Further explorations on the unique contribution of positive orientation to optimal functioning. *European Psychologist*, 17, 44-54. doi:10.1027/10169040/a000070.
- Ayres, J., Ayres, F. E., Baker, A. L., Colby, N., De Blasi, C., Dimke, D., Docken, L., Grubb, J., Hopf, T., Mueller, R. D., Sharp, D., & Wilcox, A. K. (1993). Two empirical tests of a videotape designed to reduce public speaking anxiety. *Journal of Applied Communication Research*, 21, 132-147. <http://dx.doi.org/10.1080/00909889309365362>
- Bluestone, C. (2000). Feature films as a teaching tool. *College Teaching*, 48, 141-146.
- Boyatzis, C. J. (1994). Using feature film to teach social development. *Teaching of Psychology*, 21(2), 99-101.
- Caprara, G. V., Alessandri, G., Trommsdorff, G., Heikamp, T., Yamaguchi, S., & Suzuki, F. (2012). Positive orientation across countries. *Journal of Cross Cultural Psychology*, 43, 77-83.
- Caprara, G. V., Fagnani, C., Alessandri, G., Steca, P., Gigantesco, A., Cavalli Sforza, L. L., et al. (2009). Human optimal functioning: The genetics of positive orientation towards self, life, and the future. *Behaviour Genetics*, 39, 277-284.



- Caprara, G. V., Steca, P., Alessandri, G., Abela, J. R. J., & McWhinnie, C. M. (2010). Positive orientation: Explorations on what is common to life satisfaction, self-esteem, and optimism. *Epidemiologia e Psichiatria Sociale*, 18, 63–71.
- Casper, W. J., Watt, J. D., Schleicher, D. J., Champoux, J. E., Bachiochi, P. D., & Bordeaux, C. (2003). Feature film as a resource in teaching I-O psychology. *The Industrial-Organizational Psychologist*, 41, 83–95.
- Champoux, J. E. (1999). Film as a teaching resource. *Journal of Management Inquiry*, 8(2), 240–251. <http://dx.doi.org/10.1177/105649269982016>
- Cowen, P. S. (1984). Film and text: Order effects in recall and social inferences. *Educational Communication and Technology*, 32, 131–144.
- Crellin, J. K., & Briones, A. F. (1995). Movies in medical education. *Academic Medicine*, 70(9), 745.
- Diener, E., Scollon, C. K. N., Oishi, S., Dzokoto, V., & Suh, E. M. (2000). Positivity and the construction of life satisfaction judgments: Global happiness is not the sum of its part. *Journal of Happiness Studies*, 1(2), 159–176. doi:10.1023/A:1010031813405
- Harvey, V. S., & Retter, K. (2002). Variations by gender between children and adolescents on the four basic psychological needs. *International Journal of Reality Therapy*, 21(2), 33–36.
- Hebert, T. P. & Neumiester, K. L. (2001). Guided viewing of film: A strategy for counseling gifted teenagers. *Journal of Gifted Education*, 12(4), 224–236.
- Higgins, J. A. & Dermer, S. (2001). The use of film in marriage and family counselor education. *Counselor Education and Supervision*, 40(3), 182–192.
- Kirsh, S. J. (1998). Using animated films to teach social and personality development. *Teaching of Psychology*, 25(1), 49–51.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695–706.
- Martin, A., & Jones, E. (1994). Comparing interactive videodisc instruction with traditional methods of social skills training. *Education and Training Technology International*, 31, 187–195. <http://dx.doi.org/10.1080/0954730940310304>
- Meyers, M. C., van Woerkom, M. & Bakker, A. B. (2013) The added value of the positive: A literature review of positive psychology interventions in organizations, *European Journal of Work and Organizational Psychology*, 22, 618–632, DOI: 10.1080/1359432X.2012.694689
- Niemiec, R. M., & Wedding, D. (2008). *Positive psychology at the movies: Using films to build virtues and character strengths*. Cambridge, MA: Hogrefe.
- Odou, N., & Vella-Brodrick, D. A. (2013). The efficacy of Positive Psychology interventions to increase well-being and the role of mental imagery ability. *Social Indicators Research*, 110, 111–129. doi:10.1007/s11205-011-9919-1
- Paddock, J. R., Terranova, S., & Giles, L. (2001). SASB goes Hollywood: Teaching personality theories through movies. *Teaching of Psychology*, 28, 117–121.
- Powell, M. L., Newgent, R. A. (2010). Improving the empirical credibility of cinematherapy: A single-subject interrupted time-series design. *Counseling Outcome Research and Evaluation*, 1(2), 40–49. <http://dx.doi.org/10.1177/2150137810373920>
- Robitschek, C. (1998). Personal growth initiative: The construct and its measure. *Measurement and Evaluation in Counseling and Development*, 30, 183–198.
- Robitschek, C., & Cook, S. W. (1999). The influence of personal growth initiative and coping styles on career exploration and vocational identity. *Journal of Vocational Behavior*, 54, 127–141. doi:10.1006/jvbe.1998.1650
- Robitschek, C., & Kashubeck, S. (1999). A structural model of parental alcoholism, family functioning, and psychological health: The mediating effects of hardiness and personal growth orientation. *Journal of Counseling Psychology*, 46, 159–172. doi:10.1037/0022-0167.46.2.159
- Robitschek, C., & Keyes, C. L. M. (2009). Keyes' model of mental health with personal growth initiative as a parsimonious predictor. *Journal of Counseling Psychology*, 56, 321–329. doi:10.1037/a0013954
- Robitschek, C., Ashton, M. W., Spering, C. C., Geiger, N., Byers, D., Schotts, G. C., & Thoen, M. A. (2012). Development and psychometric evaluation of the Personal Growth Initiative Scale-II. *Journal of Counseling Psychology*, 59, 274–287.
- Salomon, G. (1979). *Interaction of media, cognition and learning: an exploration of how symbolic forms cultivate mental skills and affect knowledge acquisition*, San Francisco: Jossey-Bass.
- Scheier, M. F., & Carver, C. S. (1993). On the power of positive thinking: The benefits of being optimistic. *Current Directions in Psychological Science*, 2, 26–30. doi:10.1111/1467-8721.ep10770572
- Schermer, J. (1988). Visual media, attitude formation, and attitude change in nursing education. *Educational Communication and Technology*, 36, 197–210.
- Shorey, H. S., Little, T. D., Snyder, C. R., Kluck, B., & Robitschek, C. (2007). Hope and personal growth initiative: A comparison of positive, future-oriented constructs. *Personality and Individual Differences*, 43, 1917–1926. doi:10.1016/j.paid.2007.06.011
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice friendly meta-analysis. *Journal of Clinical Psychology*, 65, 467–487.